SEMI-ANNUAL GROUNDWATER MONITORING REPORT
SBC FACILITY
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA

Prepared for:

SBCSI-EM
308 South Akard Street; Room 900
Dallas, TX 75202

Prepared by:

Shaw Environmental, Inc.
4005 Port Chicago Highway
Concord, California 94520

-DRAFT-

Shaw Project No. 102067.74000000

June 2005

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1.0 Introduction

Shaw Environmental, Inc. (Shaw) was retained by SBC (formerly Pacific Bell) to perform quarterly monitoring and sampling activities at the SBC facility located at 5749 Humboldt Hill Road in Eureka, California (Figures 1 and 2). Quarterly monitoring and sampling of MW-1, MW-2, and MW-3 was conducted for one year beginning in September 1995 at the request of the Humboldt County Department of Public Health (HCDPH). The monitoring program was reduced by the HCDPH to a semi-annual frequency beginning in January 1997. The monitoring program was further modified by HCDPH in July 1999: Well MW-2 is to be tested bi-annually, and wells MW-1 and MW-3 are tested annually during periods of expected high groundwater (typically the first quarter of each calendar year). The following report details the activities completed during the semi-annual groundwater sampling event performed on February 21, 2005, and provides additional basis for the conclusions of the Request for No Further Action report prepared in December 2004 for the site (Shaw, 2004a).

2.0 Site Background

The site originally contained a 4,000-gallon diesel underground storage tank (UST), a 4,000-gallon gasoline UST and associated pump island and piping. On behalf of Pacific Bell, Ninyo and Moore removed one UST on November 13, 1992, and the second UST and the pump island on December 8, 1993. According to Ninyo and Moore, laboratory results of the soil and groundwater samples collected from the UST pit showed elevated levels of petroleum hydrocarbons. Based on those results, the HCDPH requested an assessment of groundwater conditions at the site. After the removal of the second 4,000-gallon UST, a new 10,000-gallon double-walled UST and pump island was installed in the same excavation.

To assess groundwater, representatives of Ninyo and Moore installed three monitoring wells (MW-1, MW-2 and MW-3) on October 7, 1994. The well locations are shown on Figure 2. According to Ninyo and Moore, soil and groundwater samples taken during the well installation lacked detectable concentrations of benzene, toluene, ethyl-benzene, and total xylenes (BTEX), total petroleum hydrocarbons as gasoline (TPH-G) or total petroleum hydrocarbons as diesel (TPH-D). The presence of methyl tert-butyl ether (MTBE) was not tested for.

In a letter to Pacific Bell dated June 13, 1995, the HCDPH requested that a groundwater monitoring program be implemented for the site. Monitoring and sampling activities were to

include monthly measurements of groundwater elevation and analysis of groundwater samples for TPH-G, TPH-D, BTEX and MTBE.

The first monitoring and sampling event occurred on September 13, 1995. Detectable concentrations of TPH-G, TPH-D or BTEX were lacking in the samples from all wells. Any MTBE concentrations were below detection limits in wells MW-1 and MW-3, but 27 parts per billion (ppb) occurred in MW-2. See Table 2 for a summary of groundwater analytical data.

Subsequent monitoring and sampling events showed the concentration of MTBE was generally trending upward in samples from well MW-2, reaching a maximum concentration of 130 ppb during the August 2000 sampling event. During the February 2001 and August 2001 sampling events, MTBE had decreased to 38 ppb and 12 ppb, respectively, in samples from MW-2. However, during the March 2002 sampling event, MTBE increased to 56 ppb. MTBE concentrations remained relatively constant for the next two quarters (48 ppb in 8/02; 49 ppb in 2/03) with a rise in concentrations noted in the 8/03 sampling event (84 ppb). The maximum concentrations of MTBE detected in MW-3 and MW-1 are 13 and 4.7 ppb, respectively. TPH-G, TPH-D and BTEX concentrations have remained below detection limits in all three wells.

In a July 19, 1999 letter to Pacific Bell, the HCDPH altered the monitoring and sampling plan. The HCDPH requested that testing cease for TPH-G, TPH-D and BTEX (none of these analytes had ever been detected in any site groundwater) and that testing continue only for MTBE., to occur twice annually in well MW-2,and annually in wells MW-1 and MW-3 during high groundwater periods.

3.0 Field Activities

The semi-annual groundwater sampling event was completed on February 21, 2005 and involved the collection of depth to water measurements from all three wells (MW-1, MW-2, and MW-3), and the purging and sampling of all three wells.

Prior to collecting depth to water measurements, all monitoring wells were opened and allowed to equilibrate. Depth to water measurements were collected using an interface probe. While collecting depth-to-water measurements, no floating product was detected. Dissolved oxygen (DO) was measured in the wells using a DO meter equipped with a down-hole well probe. The probe was washed and the meter calibrated prior to use. DO measurements were recorded by

lowering the probe to the appropriate depth and slowly lowering and raising the probe until meter readings stabilized.

Sampling procedures conformed to California Regional Water Quality Control Board guidelines. Samples were collected after three well volumes had been purged and the measurements of pH, temperature, and conductivity had stabilized. The groundwater gauging and purging forms are contained in Appendix A.

Each well was purged and sampled with a new single-use disposable bailer. Groundwater was transferred directly from the bailer to appropriately preserved bottles supplied by the laboratory. Care was taken to ensure that no headspace was present in the 40 ml-VOA sample containers. Once the sample was collected, the bottles were placed in seam sealing, polyethylene bags and sealed with security tape. The sample was stored in an ice chest with water/ice until delivery to McCampbell Analytical, Incorporated (an ELAP-certified laboratory) for analysis.

The groundwater samples from the three wells were analyzed for MTBE using EPA method 8260B (modified). Upon arrival at the laboratory, sample condition was checked. No nonconformities were noted on the chain-of-custody form. A copy of the analysis request and chain-of-custody record is included in Appendix B.

4.0 Results

Depth to groundwater in MW-1 was measured at 3.30 feet below the ground surface (bgs), 5.26 feet bgs in MW-2, and 5.86 feet bgs in MW-3. Groundwater gradient was calculated to be 0.067 feet per feet, directed to the west (Figure 3), which is consistent with past measurements (although a less steep gradient than that in the last sampling event, August 2004). The DO was 0.83 milligrams per liter (mg/L) for MW-1, 0.78 mg/L for MW-2, and 0.86 mg/L for MW-3.

MTBE was detected at a concentration of 0.64 ppb in the groundwater sample collected from well MW-2; the concentration was well below the range of historic concentrations (Table 2). MTBE was not detected in either MW-1 or MW-3. A copy of the laboratory analytical report is included in Appendix B. The laboratory results are summarized in Table 2 and shown in Figure 4.

Extensive previous groundwater sampling has indicated that MTBE concentrations in on-site wells are consistently decreasing with time. This decrease has been particularly consistent since 2003, when the likely on-site sources (UST system and on-site fueling activities) had been removed. The last two semi-annual sampling events (August 2004 and February 2005) show MTBE concentrations below the California Maximum Contaminant Level (CA MCL) of 13 ppb for MTBE. However, to verify the apparent decreasing trend in MTBE, time-trendlines for MTBE concentrations were drawn for sampling from 2000 (the point of highest MTBE concentrations) to the present. Trendlines were also drawn for results only since 2003, when the last UST removal occurred at the site. These trendlines are presented in Figure 5, and include trendlines with first quarter and third quarter results segregated to remove possible seasonal effects, as well as a trendline for all results compiled. All of the trendlines starting from 2000 show MTBE concentrations decreasing consistently below the 13 ppb MCL by late 2005 to mid-2006. The 2003 trendlines that originate with 2003 data show concentrations decreasing even more quickly.

5.0 Management of Waste Liquids

Approximately 15 gallons of purge water from the three wells was generated during the February 21, 2005 sampling event. The purge water was transported to a temporary holding tank located at Shaw's facility in Sacramento, California pending disposal. A copy of the disposal documentation will be forwarded upon receipt.

6.0 Conclusions and Recommendation for No Further Action

Shaw Environmental, Inc. prepared and submitted a *Request for No Further Action* report in December 2004 (Shaw, 2004a) on behalf of SBC. The report findings are summarized as follows:

- No TPH-D, TPH-G, or BTEX constituents have been detected in on-site monitoring wells.
- The majority of impacted soils have been removed from the site.

- MTBE concentrations detected in on-site wells are declining, and potential sources are no longer present.
- MTBE remaining in groundwater is unlikely to adversely impact water quality, human health, or the environment.
- Natural attenuation will likely reduce the concentrations of residual MTBE in groundwater.

The present February 2005 results further confirm the decreasing trend of MTBE. MTBE was not detected in samples from either well MW-1 or MW-3, and was detected at 0.64 ppb in the samples from well MW-2, the lowest concentration detected in a well MW-2 sample since groundwater sampling began (Table 2). The trendlines presented in Figure 5 indicate that the MTBE concentration trend is consistently decreasing and will be consistently below the California MCL of 13 ppb by late 2005 or early to mid-2006.

Based on the latest data and the findings of the Closure Request, no further action and case closure, along with proper destruction of the monitoring wells in coordination with the Humboldt County Department of Public Health, is recommended.

7.0 References

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5749 Humboldt Hill Road, Eureka, California, January 2004.

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Shaw Environmental, Inc. (Shaw, 2004b), *Semi-Annual Groundwater Sampling Report, SBC, 5749 Humboldt Hill Road, Eureka*, California, September 2004.

8.0 Signatures

The interpretations and conclusions contained in this report represent our professional opinions. These opinions are based on currently accepted engineering practices at this time and for this specific site. No additional warranty is implied or intended.

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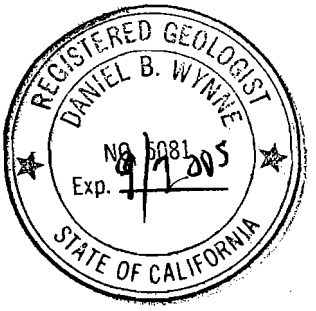

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Shaw Environmental, Inc.

The work described in this report was performed under the direct supervision of a State of California Registered Geologist.

TABLES

TABLE 1

SUMMARY OF GROUNDWATER ELEVATION DATA (in feet msl)
SBC
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA

Monitoring Well No.	Date of Measurement	Top of Casing Elevation (MSL)	Depth to Groundwater	Groundwater Elevation (MSL)
MW-1	10/10/94	44.19	5.23	38.96
	09/12/95		3.83	40.36
	10/11/95		3.63	40.56
	11/09/95		3.96	40.23
	12/12/95		3.86	40.33
	01/15/96		4.64	39.55
	02/09/96		4.06	40.13
	03/14/96		3.68	40.51
	04/08/96		3.50	40.69
	05/13/96		3.08	41.11
	06/21/96		2.68	41.51
	07/19/96		2.63	41.56
	08/30/96		2.90	41.29
	01/29/97		3.86	40.33
	07/08/97		2.54	41.65
	01/19/98		4.04	40.15
	07/08/98		3.03	41.16
	01/21/99		4.15	40.04
	08/26/99		3.09	41.10
	02/28/00		3.66	40.53
	08/18/00		--	--
	02/23/01		5.09	39.10
	08/10/01		3.59	40.60
	03/12/02		4.29	39.90
	08/28/02		4.09	40.10
	02/17/03		3.89	40.30
	08/18/03		2.68	41.51
	03/01/04		3.62	40.57
	08/24/04		2.84	41.35
	02/21/05		3.30	40.89
MW-2	10/10/94	41.94	6.61	35.33
	01/15/95		5.46	36.48
	09/12/95		3.34	38.60
	10/11/95		4.06	37.88
	11/09/95		4.57	37.37
	12/12/95		5.08	36.86
	02/09/96		5.44	36.50
	03/14/96		4.98	36.96
	04/08/96		4.46	37.48
	05/13/96		4.10	37.84
	06/21/96		3.40	38.54
	07/19/96		3.16	38.78
	08/30/96		3.52	38.42
	01/29/97		5.51	36.43
	07/08/97		3.07	38.87

TABLE 1

SUMMARY OF GROUNDWATER ELEVATION DATA (in feet msl)
SBC
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA

Monitoring Well No.	Date of Measurement	Top of Casing Elevation (MSL)	Depth to Groundwater	Groundwater Elevation (MSL)
MW-2	01/19/98	41.94	5.55	36.39
	07/08/98		4.29	37.65
	01/21/99		5.76	36.18
	08/26/99		3.62	38.32
	02/28/00		5.44	36.50
	08/18/00		3.98	37.96
	02/23/01		5.81	36.13
	08/10/01		4.11	37.83
	03/12/02		5.28	36.66
	08/28/02		4.04	37.90
	02/17/03		5.36	36.58
	08/18/03		3.23	38.71
	03/01/04		4.84	37.10
	08/24/04		8.91	33.03
	02/21/05		5.26	36.68
MW-3	10/10/94	42.96	7.78	35.18
	09/12/95		4.53	38.43
	10/11/95		5.37	37.59
	11/09/95		6.47	36.49
	12/12/95		7.60	35.36
	01/15/95		8.46	34.50
	02/09/96		8.20	34.76
	03/14/96		7.96	35.00
	04/08/96		7.14	35.82
	05/13/96		6.32	36.64
	06/21/96		5.16	37.80
	07/19/96		5.04	37.92
	08/30/96		4.92	38.04
	01/29/97		8.32	34.64
	07/08/97		4.38	38.58
	01/19/98		8.51	34.45
	07/08/98		5.18	37.78
	01/21/99		9.01	33.95
	08/26/99		5.02	37.94
	02/28/00		8.60	34.36
	08/18/00		--	--
	02/23/01		8.96	34.00
	08/10/01		5.08	37.88
	03/12/02		8.01	34.95
	08/28/02		5.29	37.67
	02/17/03		8.12	34.84
	08/18/03		5.32	37.64
	03/01/04		7.83	35.13
	08/24/04		6.26	36.70
	02/21/05		5.86	37.10

NOTES:

MSL = Elevation above mean sea level, in feet
-- = not measured/not applicable

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL DATA
SBC
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA

Sample No.	Date Sampled	TPH-Gas (ppb)	TPH-Diesel (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE (ppb)
MW-1	10/11/94	ND	ND	ND	ND	ND	ND	--
	09/13/95	ND	ND	ND	ND	ND	ND	ND
	12/12/95	ND	ND	ND	ND	ND	ND	ND
	03/14/96	ND	ND	ND	ND	ND	ND	ND
	06/21/96	ND	ND	ND	ND	ND	ND	ND
	01/29/97	ND	ND	ND	ND	ND	ND	ND
	07/08/97	ND	ND	ND	ND	ND	ND	ND
	01/19/98	ND	ND	ND	ND	ND	ND	ND
	07/08/98	ND	ND	ND	ND	ND	ND	ND
	01/21/99	ND	ND	ND	ND	ND	ND	ND
	08/26/99	--	--	--	--	--	--	--
	02/28/00	--	--	--	--	--	--	ND
	08/18/00	--	--	--	--	--	--	--
	02/23/01	--	--	--	--	--	--	4.7
	08/10/01	--	--	--	--	--	--	--
	03/12/02	--	--	--	--	--	--	ND
	08/28/02	--	--	--	--	--	--	--
	02/17/03	--	--	--	--	--	--	ND
	08/18/03	--	--	--	--	--	--	--
	03/01/04	--	--	--	--	--	--	ND
	08/24/04	--	--	--	--	--	--	--
	02/21/05	--	--	--	--	--	--	ND
MW-2	10/11/94	ND	ND	ND	ND	ND	ND	--
	09/13/95	ND	ND	ND	ND	ND	ND	27
	12/12/95	ND	ND	ND	ND	ND	ND	30
	03/14/96	ND	ND	ND	ND	ND	ND	35
	06/21/96	ND	ND	ND	ND	ND	ND	42
	01/29/97	ND	ND	ND	ND	ND	ND	59
	07/08/97	ND	ND	ND	ND	ND	ND	82
	01/19/98	ND	ND	ND	ND	ND	ND	69
	07/08/98	ND	ND	ND	ND	ND	ND	75
	01/21/99	ND	ND	ND	ND	ND	ND	92
	08/26/99	--	--	--	--	--	--	91
	02/28/00	--	--	--	--	--	--	67
	08/18/00	ND	--	ND	ND	ND	ND	130
	02/23/01	--	--	--	--	--	--	38
	08/10/01	--	--	--	--	--	--	12*
	03/12/02	--	--	--	--	--	--	56
	08/28/02	--	--	--	--	--	--	48
	02/17/03	--	--	--	--	--	--	49

TABLE 2

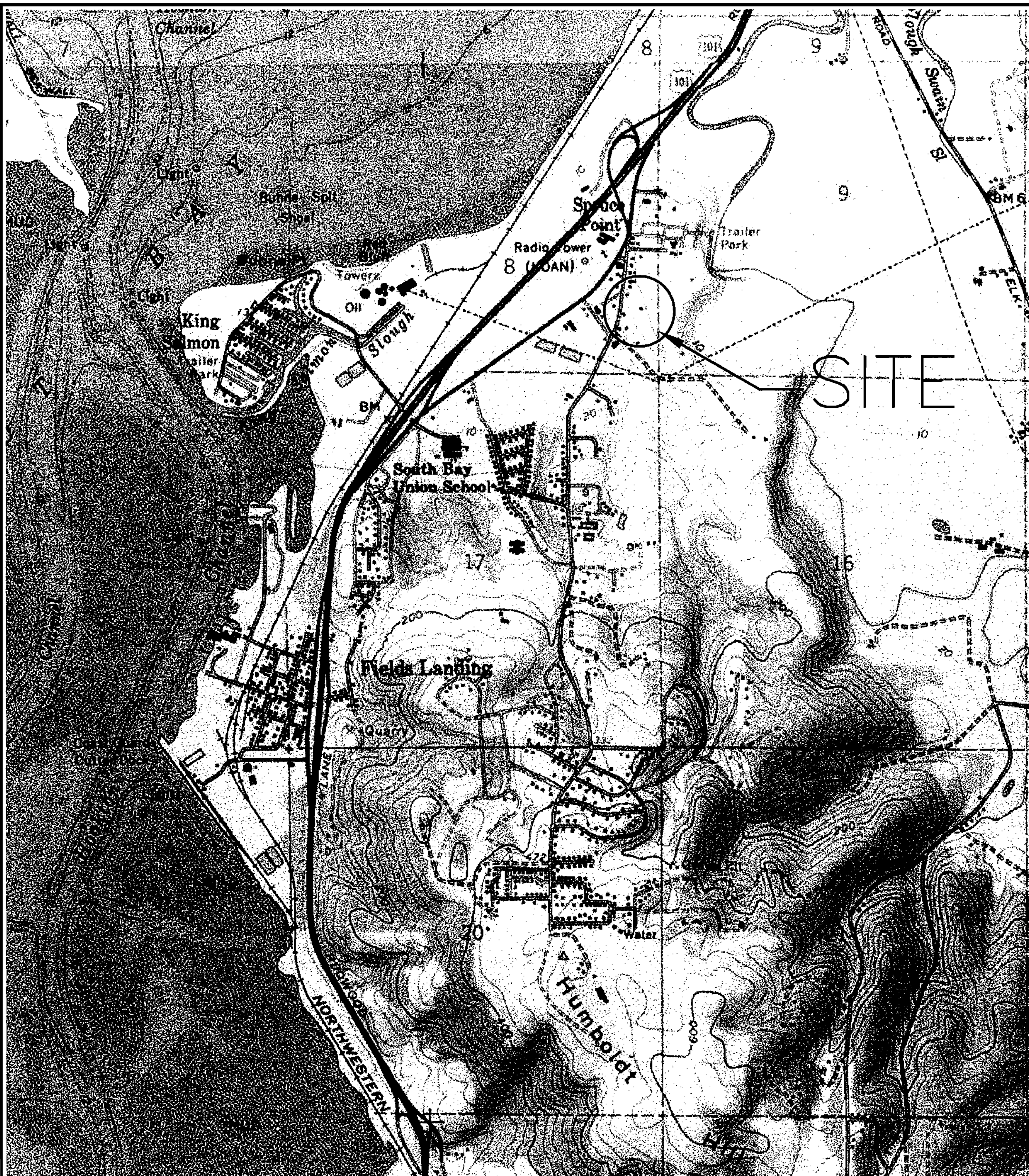
SUMMARY OF GROUNDWATER ANALYTICAL DATA
SBC
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA

Sample No.	Date Sampled	TPH-Gas (ppb)	TPH-Diesel (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE (ppb)
MW-2	08/18/03	--	--	--	--	--	--	84
	03/01/04	--	--	--	--	--	--	41
	08/24/04	--	--	--	--	--	--	9.4
	02/21/05	--	--	--	--	--	--	0.64
MW-3	10/11/94	ND	ND	ND	ND	ND	ND	--
	09/13/95	ND	ND	ND	ND	ND	ND	ND
	12/12/95	ND	ND	ND	ND	ND	ND	ND
	03/14/96	ND	ND	ND	ND	ND	ND	ND
	06/21/96	ND	ND	ND	ND	ND	ND	ND
	01/29/97	ND	ND	ND	ND	ND	ND	ND
	07/08/97	ND	ND	ND	ND	ND	ND	ND
	01/19/98	ND	ND	ND	ND	ND	ND	ND
	07/08/98	ND	ND	ND	ND	ND	ND	ND
	01/21/99	ND	ND	ND	ND	ND	ND	ND
	08/26/99	--	--	--	--	--	--	--
	02/28/00	--	--	--	--	--	--	ND
	08/18/00	--	--	--	--	--	--	--
	02/23/01	--	--	--	--	--	--	13
	08/10/01	--	--	--	--	--	--	---
	03/12/02	--	--	--	--	--	--	ND
	08/28/02	--	--	--	--	--	--	--
	02/17/03	--	--	--	--	--	--	ND
	08/18/03	--	--	--	--	--	--	--
	03/01/04	--	--	--	--	--	--	ND
	08/24/04	--	--	--	--	--	--	--
	02/21/05	--	--	--	--	--	--	ND

NOTES:

TPH-Gas = Total petroleum hydrocarbons as gasoline analyzed in accordance with modified EPA test method 8015.
TPH-Diesel = Total petroleum hydrocarbons as diesel analyzed in accordance with modified EPA test method 8015.
Benzene, toluene, ethylbenzene, xylenes, and methyl tertiary butyl ether (MTBE) analyzed in accordance with EPA test method 602.
ppb = parts per billion
-- = Not analyzed for this constituent.
* - Sample was further analyzed for TPH-Multi Range (TPH-D, TPH-G, TPH-Motor Oil) by EPA method 8020 and for Volatile Organic Compounds by EPA method 8260. No analytes except MTBE were encountered.
ND = Not detected, at or above the detection limit

FIGURES



REFERENCE:
USGS 7.5' QUADS: EUREKA
AND FIELDS LANDING

APPROXIMATE SCALE

0 2000 4000 FEET

Shaw
Shaw E & I, Inc.

SBC
DALLAS, TEXAS

FIGURE 1
SITE LOCATION MAP
SBC FACILITY
5749 HUMBOLT HILL ROAD
EUREKA, CALIFORNIA

IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY	APPROVED BY	DRAWING NUMBER
EUREKA.TIF	---	Concord	SJZ	4-6-01			799511-A50

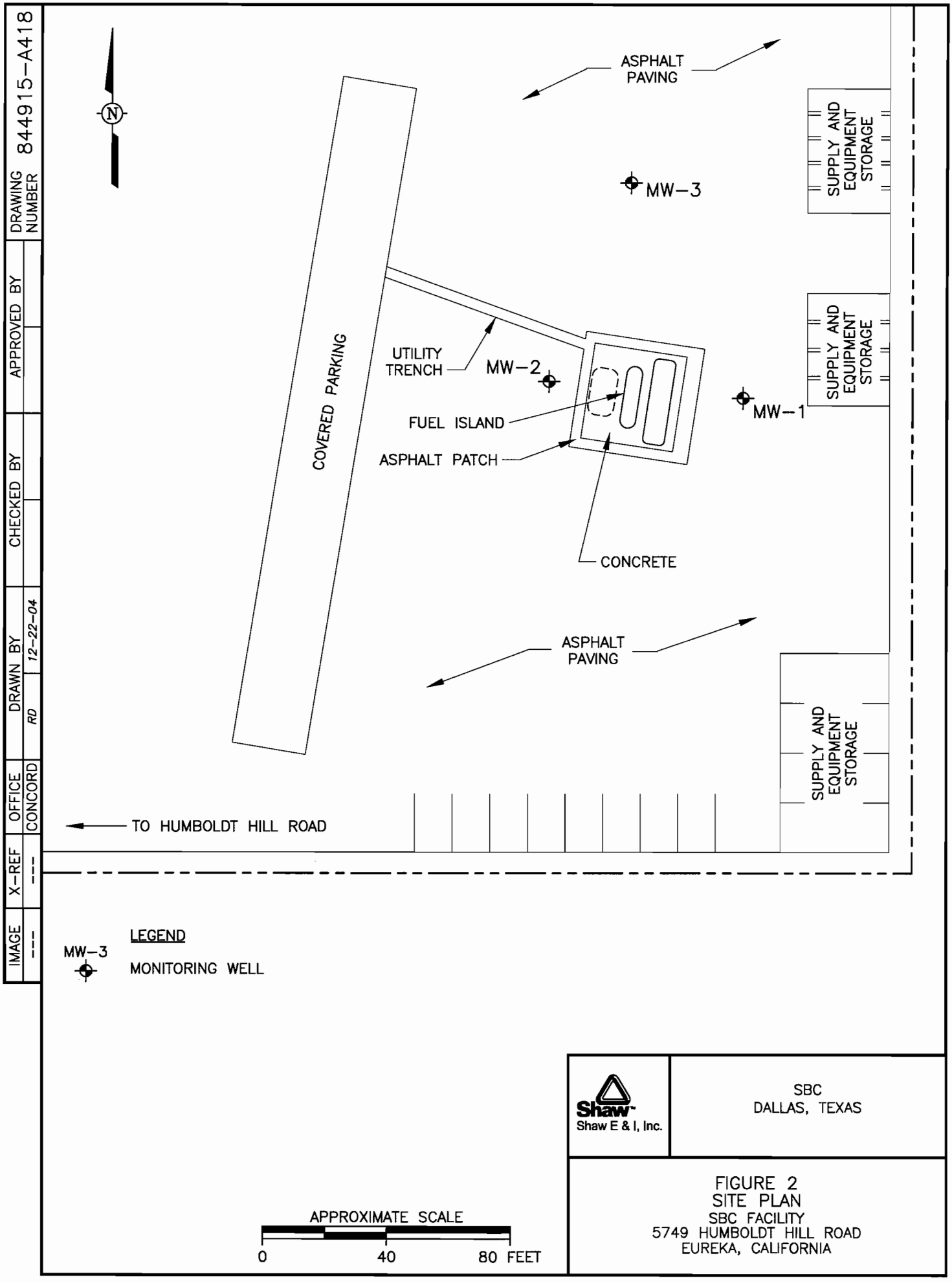


IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	CONCORD	RD	12-22-04			844915-A418

Shaw
Shaw E & I, Inc.

SBC
DALLAS, TEXAS

FIGURE 2
SITE PLAN
SBC FACILITY
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA

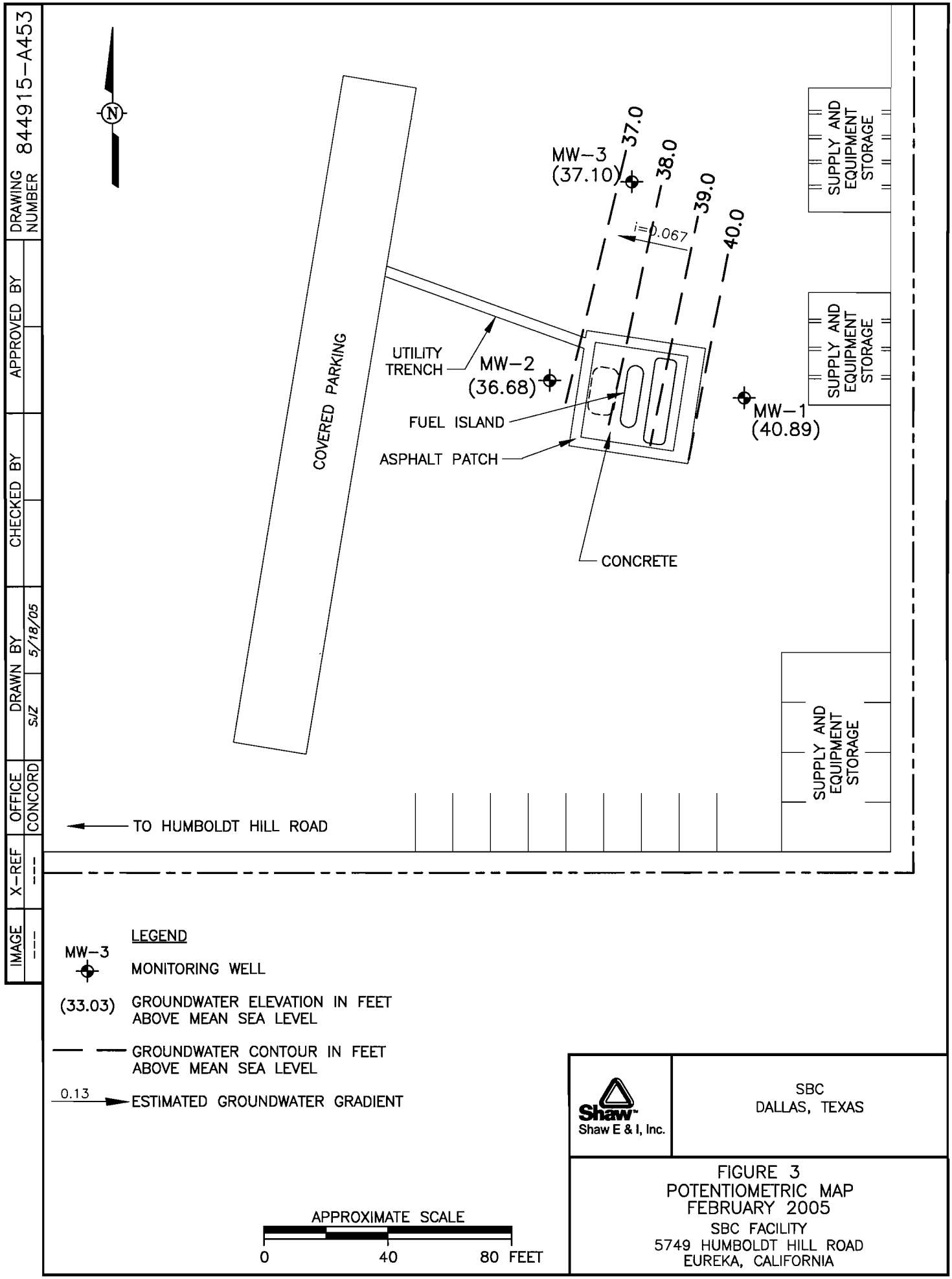


IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	CONCORD	SJZ	5/18/05			844915-A453

LEGEND

MW-3 — MONITORING WELL

(33.03) — GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

— — GROUNDWATER CONTOUR IN FEET ABOVE MEAN SEA LEVEL

0.13 → ESTIMATED GROUNDWATER GRADIENT

APPROXIMATE SCALE

0 40 80 FEET

Shaw E & I, Inc.

SBC
DALLAS, TEXAS

FIGURE 3
POTENTIOMETRIC MAP
FEBRUARY 2005
SBC FACILITY
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA

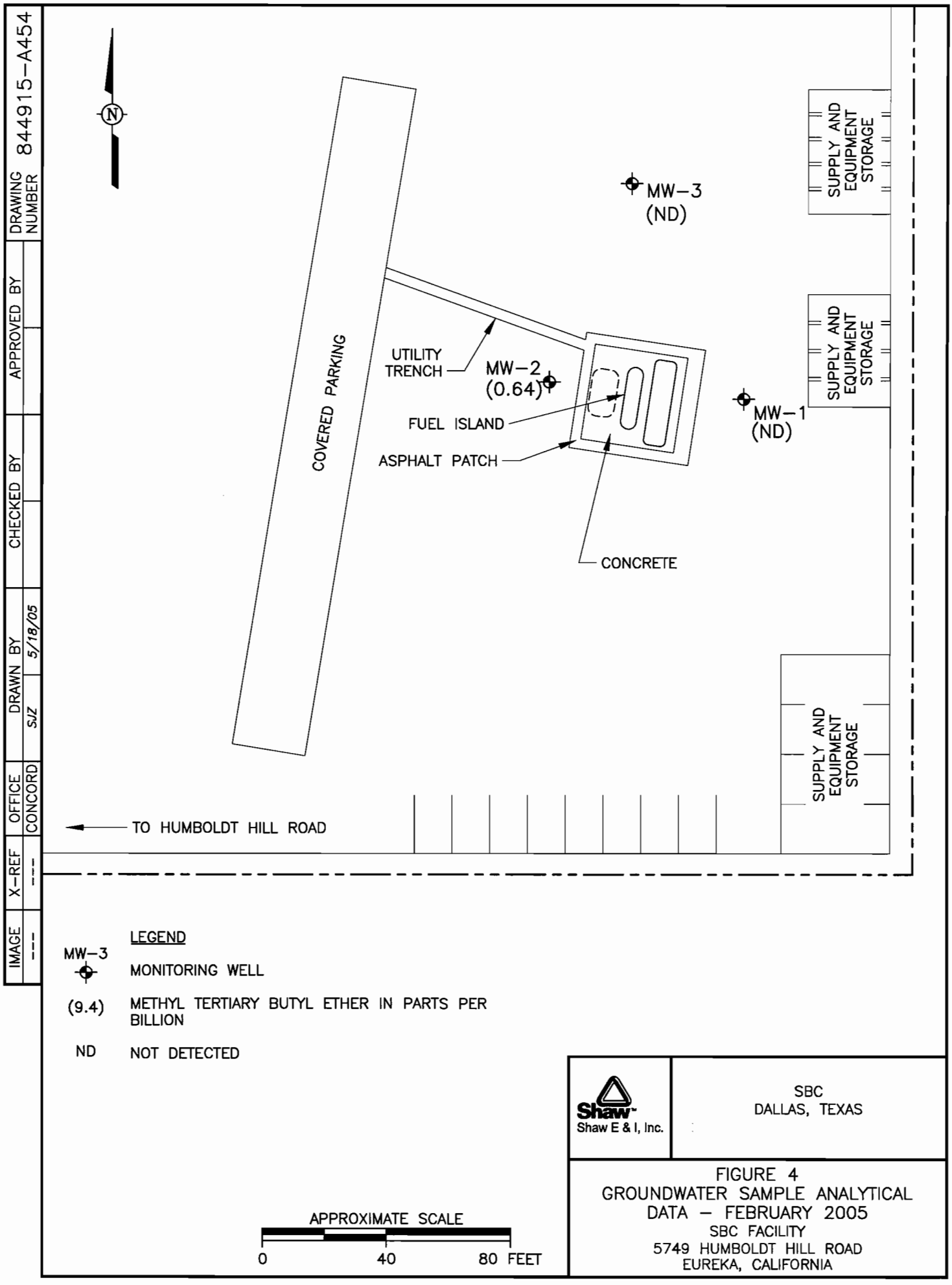


IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	CONCORD	SJZ	5/18/05			844915-A454

LEGEND

MW-3 — MONITORING WELL

(9.4) — METHYL TERTIARY BUTYL ETHER IN PARTS PER BILLION

ND — NOT DETECTED

APPROXIMATE SCALE

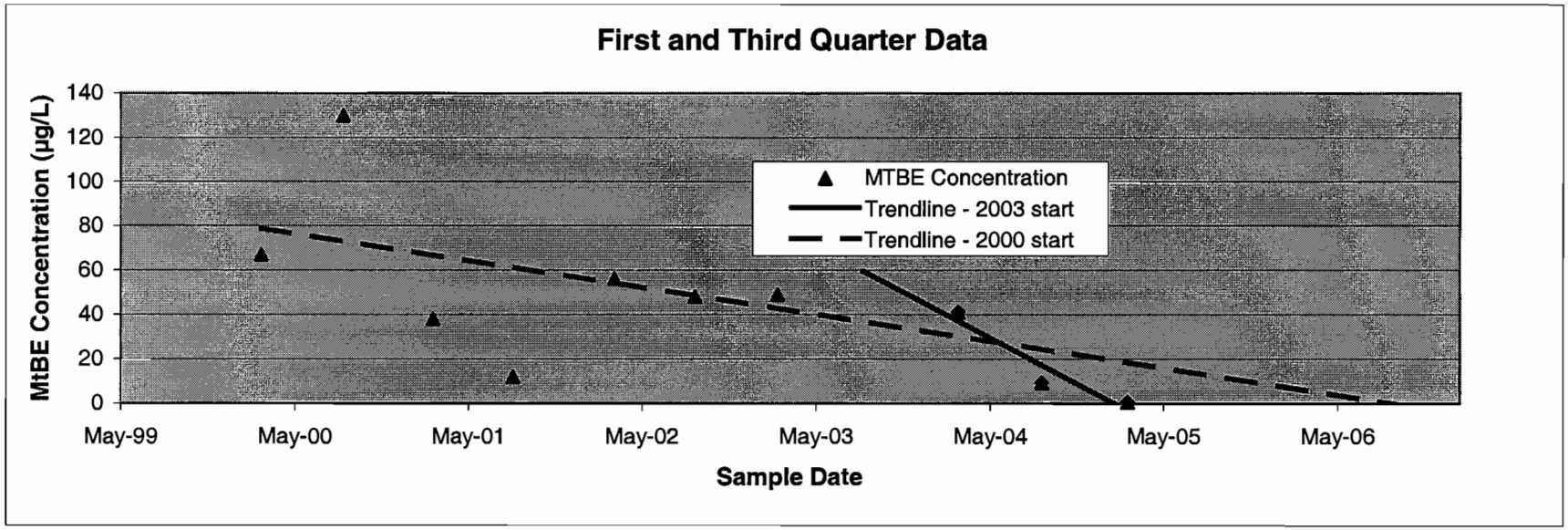
0 40 80 FEET

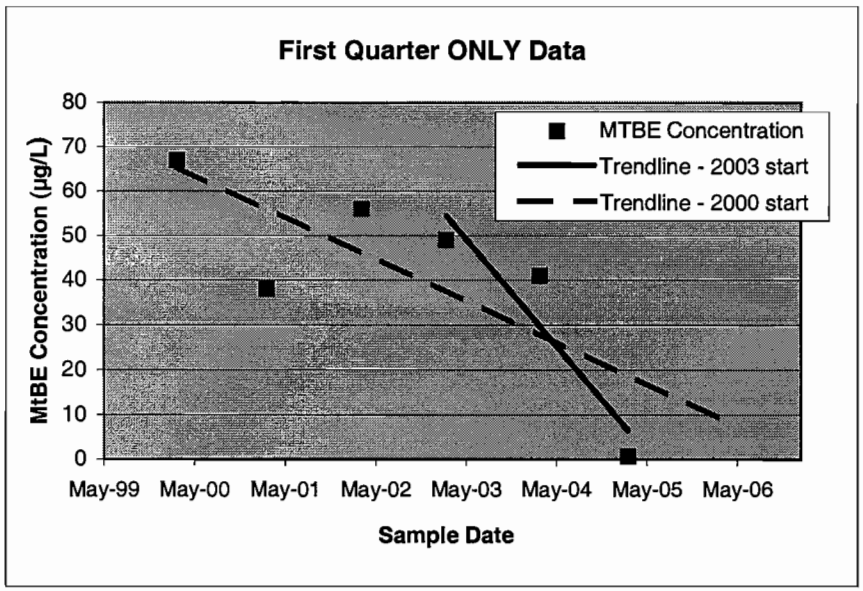
Shaw
Shaw E & I, Inc.

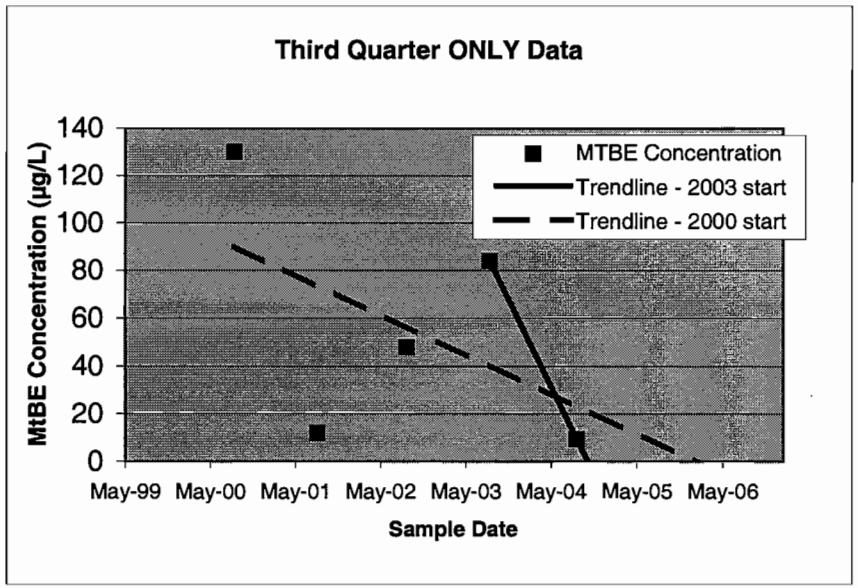
SBC
DALLAS, TEXAS

FIGURE 4
GROUNDWATER SAMPLE ANALYTICAL DATA – FEBRUARY 2005
SBC FACILITY
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA

FIGURE 5
TRENDLINES FOR MTBE CONCENTRATIONS
SBC FACILITY
5749 HUMBOLDT HILL ROAD
EUREKA, CALIFORNIA







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APPENDIX A

Groundwater Monitoring Field Forms

GROUNDWATER GAUGING FORM

OB NAME: SBC
5749 Humboldt Hill Rd., Eureka, CA

JOB NUMBER: 102067.74

?#:

DATE: 12/1/05

IEASURED TO TOC OR GRADE?

Name:

WELL I.D.	DTB (Feet)	WELL DIAM. (inches)	DTW (Feet)	DTP (Feet)	PT (Feet)	Dissolved Oxygen (mg/L)	COMMENTS Please note if well needs locking cap or box repair
MW-1	14.50	2	3.30	—	—	.83	
MW-2	14.00	2	5.26	—	—	.78	
MW-3	14.50	2	5.86	—	—	.86	

Drum Inventory Record

102067 / 7400	Eureka	2-21-05
Project No	**Location**	**Date**
SBC	Paul Weinhardt	Mon
Client	**Sampler**	**Day of Week**

DRUM NUMBER OR ID	WELL OR SOURCE ID(s)	TYPE OF MATERIAL	AMOUNT OF MATERIAL IN DRUM	DATE ACCUMULATED OR GENERATED
SACTO TANK	MW1 / MW3	WATER	15GAL	2-21-05

Sketch locations of drums, include drum ID's

COMMENTS:

Number of Drums From This Event 0

Total Number of Drums At Site 0

JOB SAFETY ANALYSIS

Location of Job(Unit/Location on Project): SBC EUREKA		
Required PPE:	Safety Access/ Location	Supervisor of Work:
	Safe Haven:	JSA Prepared By:
Date: 2.21.05	Wind Direction:	Are other crews in area?
Pre-Job Preparation Fill out JSA Review JSA (EVERYONE) Sign JSA (EVERYONE)	Evacuation Route: Assembly Point:	New: / Revised:

Job Task	Audit the Job Audit Time:
{Insert Daily Site Task(s) here} Quarterly Sampling	
Potential Hazards	Supervisors Comments
{Insert Daily Site Specific Hazard Information here} Long DRIVE TO SITE	
Recommended Action or Procedure	Supervisor's Initials:
{Insert Daily Site Specific ways to Reduce Exposure to Hazard here} TAKE FREQUENT STOPS WHILE DRIVING STAY ALERT.!!	

Crew Name (printed):	Crew Signatures	
PAUL WEINHARDT	Paul Weinhardt	

Rev. 1/97

WATER SAMPLE FIELD DATA SHEET

PROJECT NO : 102067 / 74 — SAMPLE ID : MW- 1

PURGED BY : Paul Weinhardt — CLIENT NAME : SBC

SAMPLED BY : Paul Weinhardt — LOCATION : Eureka, Calif.

TYPE: Groundwater X — Surface Water ____ — Leachate ____ — Other ____

CASING DIAMETER (inches): 2 X (.163) — 3 ____ (.367) — 4 ____ (.652) — 4.5 ____ (.826) — 6 ____ (1.47) — Other ____ (1"-.041 / 8"-2.61)

CASING ELEVATION (feet/MSL) : ____ — VOLUME IN CASING (gal.) : 1B2

DEPTH OF WELL (feet) : 14.90 — CALCULATED PURGE (gal.) : 547

DEPTH TO WATER (feet) : 3.30 — ACTUAL PURGE VOL. (gal.) : 600

DATE PURGED : 2.21.05 — END PURGE : 1624

DATE SAMPLED : 2.21.05 — SAMPLING TIME : 1628

TIME (2400 HR)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm@25°c)	TEMPERATURE (°C)	COLOR (visual)	TURBIDITY (visual)
1610	2.0	721	425	17.5 C	cudy	MOD
1615	4.0	713	408	16.90	cloudy	MOD
1621	6.0	707	401	16.80	cloudy	MOD

OTHER: ____ — ODOR: ____ — (COBALT 0-100) — (NTU 0-200)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, XDUP-1) : ____

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
____ 2" Bladder Pump	____ Bailer (Teflon)	____ 2" Bladder Pump	____ Bailer (Teflon)
____ Centrifugal Pump	____ Bailer (PVC)	____ Bomb Sampler	____ Bailer (Stainless Steel)
____ Submersible Pump	____ Bailer (Stainless Steel)	____ Dipper	____ Submersible Pump
2 Dispo Bailer	____ Dedicated	1 Dispo Bailer	____ Dedicated
Other: ____		Other: ____	

WELL INTEGRITY: GOOD — LOCK: NO

REMARKS: ____

pH, E.C., Temp. Meter Calibration: Date: ____ Time: ____ Meter Serial No.: ____

E.C. 1000 ____ / ____ pH 7 ____ / ____ pH 10 ____ / ____ pH 4 ____ / ____

Temperature °C ____

SIGNATURE: Paul Weinhardt — REVIEWED BY: ____ PAGE ____ OF ____

Rev. 1/97

WATER SAMPLE FIELD DATA SHEET

PROJECT NO : 102067 / 74 SAMPLE ID : MW-2

PURGED BY : Paul Weinhardt CLIENT NAME : SBC

SAMPLED BY : Paul Weinhardt LOCATION : Eureka, Calif.

TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____

CASING DIAMETER (inches): 2 X (.163) 3 ____ (.367) 4 ____ (.652) 4.5 ____ (.826) 6 ____ (1.47) Other ____ (1"-.041 / 8"-2.61)

CASING ELEVATION (feet/MSL) : ____ VOLUME IN CASING (gal.) : 142

DEPTH OF WELL (feet) : 14.00 CALCULATED PURGE (gal.) : 427

DEPTH TO WATER (feet) : 5.26 ACTUAL PURGE VOL. (gal.) : 450

DATE PURGED : 2.21.05 END PURGE : 1530

DATE SAMPLED : 2.21.05 SAMPLING TIME : 1535

TIME (2400 HR)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm@25°c)	TEMPERATURE (°C)	COLOR (visual)	TURBIDITY (visual)
1541	1.5	721	2468	16.90	cloudy	mod
1545	3.0	716	2371	16.60	cloudy	mod
1550	4.5	711	2280	16.70	cloudy	mod

OTHER: ____ ODOR: ____ (COBALT 0-100) (NTU 0-200)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, XDUP-1) : ____

PURGING EQUIPMENT

____ 2" Bladder Pump ____ Bailer (Teflon)
____ Centrifugal Pump ____ Bailer (PVC)
____ Submersible Pump ____ Bailer (Stainless Steel)
X Dispo Bailer ____ Dedicated
Other: ____

SAMPLING EQUIPMENT

____ 2" Bladder Pump ____ Bailer (Teflon)
____ Bomb Sampler ____ Bailer (Stainless Steel)
____ Dipper ____ Submersible Pump
X Dispo Bailer ____ Dedicated
Other: ____

WELL INTEGRITY: G7000 LOCK: NO

REMARKS: ____

pH, E.C., Temp. Meter Calibration: Date: ____ Time: ____ Meter Serial No.: ____

E.C. 1000 ____ / ____ pH 7 ____ / ____ pH 10 ____ / ____ pH 4 ____ / ____

Temperature °C ____

SIGNATURE: Paul Weinhardt REVIEWED BY: ____ PAGE ____ OF ____

Rev. 1/97

WATER SAMPLE FIELD DATA SHEET

PROJECT NO : 102067 / 74 SAMPLE ID : MW- 3

PURGED BY : Paul Weinhardt CLIENT NAME : SBC

SAMPLED BY : Paul Weinhardt LOCATION : Eureka, Calif.

TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____

CASING DIAMETER (inches): 2 X (.163) 3 ____ (.367) 4 ____ (.652) 4.5 ____ (.826) 6 ____ (1.47) Other ____ (1"-.041 / 8"-2.61)

CASING ELEVATION (feet/MSL) : ____ VOLUME IN CASING (gal.) : 140

DEPTH OF WELL (feet) : 14.90 CALCULATED PURGE (gal.) : 422

DEPTH TO WATER (feet) : 5.86 ACTUAL PURGE VOL. (gal.) : 450

DATE PURGED : 2.21.05 END PURGE : 1518

DATE SAMPLED : 2.21.05 SAMPLING TIME : 1523

TIME (2400 HR)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm@25°c)	TEMPERATURE (°C)	COLOR (visual)	TURBIDITY (visual)
1510	1.5	736	319	16.90	cloudy	mod
1514	3.0	728	311	16.60	cloudy	mod
1518	4.5	725	306	16.70	cloudy	mod

OTHER: ____ ODOR: ____ (COBALT 0-100) (NTU 0-200)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, XDUP-1) : ____

PURGING EQUIPMENT

____ 2" Bladder Pump ____ Bailer (Teflon)
____ Centrifugal Pump ____ Bailer (PVC)
____ Submersible Pump ____ Bailer (Stainless Steel)
X Dispo Bailer ____ Dedicated
Other: ____

SAMPLING EQUIPMENT

____ 2" Bladder Pump ____ Bailer (Teflon)
____ Bomb Sampler ____ Bailer (Stainless Steel)
____ Dipper ____ Submersible Pump
X Dispo Bailer ____ Dedicated
Other: ____

WELL INTEGRITY: Good LOCK: NO

REMARKS: QA/QC of this well

pH, E.C., Temp. Meter Calibration: Date: ____ Time: ____ Meter Serial No.: ____

E.C. 1000 ____ / ____ pH 7 ____ / ____ pH 10 ____ / ____ pH 4 ____ / ____

Temperature °C ____

SIGNATURE: Paul Weinhardt REVIEWED BY: ____ PAGE ____ OF ____

APPENDIX B

Laboratory Report and Chain-of-Custody Record

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

Shaw Environmental 4005 Port Chicago Hwy Concord, CA 94520	Client Project ID: #102067.74000000; SBC-Eureka/T0602300311	Date Sampled: 02/21/05
		Date Received: 02/24/05
	Client Contact: Rob Delnagro	Date Reported: 03/01/05
	Client P.O.:	Date Completed: 03/01/05

WorkOrder: 0502353

March 01, 2005

Dear Rob:

Enclosed are:

1). the results of 4 analyzed samples from your **#102067.74000000; SBC-Eureka/T0602300311 project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

Shaw Environmental 4005 Port Chicago Hwy Concord, CA 94520	Client Project ID: #102067.74000000; SBC-Eureka/T0602300311	Date Sampled: 02/21/05
		Date Received: 02/24/05
	Client Contact: Rob Delnagro	Date Extracted: 02/24/05
	Client P.O.:	Date Analyzed: 02/24/05

Methyl tert-Butyl Ether*

Extraction method: SW5030B Analytical methods: SW8260B Work Order: 0502353

Lab ID	Client ID	Matrix	Methyl-t-butyl ether (MTBE)	DF	% SS
001A	MW-1	W	ND	1	101
002A	MW-2	W	0.64	1	103
003A	MW-3	W	ND	1	103
004A	QCEB	W	ND	1	104

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	0.5	µg/L
	S	NA	NA

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0502353

EPA Method: SW8260B Extraction: SW5030B BatchID: 15120 Spiked Sample ID: 0502349-003A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
Methyl-t-butyl ether (MTBE)	ND	10	96.5	94.7	1.88	92.5	97	4.73	70 - 130	70 - 130
%SS1:	104	10	104	106	1.15	103	105	2.25	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0502353 **ClientID: SHAW**

Report to:
Rob Delnagro
Shaw Environmental
4005 Port Chicago Hwy
Concord, CA 94520
TEL: 925-288-9898
FAX: 925-288-2359
ProjectNo: #102067.74000000; SBC-Eureka/T0602
PO:

Bill to:
Accounts Payable
Shaw Environmental & Infrastructure
4005 Port Chicago Hwy
Concord, CA 94520

Requested TAT: 5 days
Date Received: 02/24/2005
Date Printed: 02/24/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0502353-001	MW-1	Water	2/21/05 4:28:00 PM	☐	A	A													
0502353-002	MW-2	Water	2/21/05 3:55:00 PM	☐	A														
0502353-003	MW-3	Water	2/21/05 3:23:00 PM	☐	A														
0502353-004	QCEB	Water	2/21/05	☐	A														

Test Legend:

1	MTBE_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Sonia Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bill to: Rob Delnagro
Shaw Environemental & Infrastructure, Inc.
4005 Pt. Chicago Hwy, Concord, CA 94520
Phone: (925) 288-2103 Fax: (925) 827-2029

Turn Around Time:
__Rush __Normal __24 Hour
__48 Hour __72 Hour __5 Day

Chain Of Custody 050 2353 COC #: 1101

Project Name: SBC-Eureka/T0602300311

5749 Humboldt Hill Rd, Eureka, CA

Project #: ~~822463-41000000~~ 102067.74000000

Year _____ Quarter _____

Sampler: _____

Sampler Signature: _____

Project Manager: Sydney Geels

SHIP DATE: _____

LAB: McCampbell Analytical Inc.
110 2nd Avenue South, #D7
Pacheco, CA 94553-5560

Lab Contact: _____

Lab Phone: (925) 798-1620

Carrier/Waybill No.: _____

EDF Required: Send to Rob Delnagro at robert.delnagro@shawgrp.com

Sample Information					Analysis Request							
					HCl							Preservative
Sample ID	Sample Date mm/dd/yy	Sample Time	Sample Type/ Matrix (Water, Soil, Air, Sludge)	# Containers	MTBE by 8260							Comments
Temperature Blank			Water									One 40 mL in each cooler
+ MW-1	2.21.05	1628	W	3	X							
+ MW-2	↓	1555	↓	3	X							
+ MW-3	↓	1523	↓	3	X							
✓ QCEB	2.21.05	N/A	W	3	X							Equipment Blank (if needed)

REC'D SEALED & INTACT VIA Fed Ex

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB ✓
PRESERVATION ✓

APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ✓

VOAS	O&G	METALS	OTHER

Possible Hazard Identification:
__Non-Hazard __Flammable __Skin Irritant __Poison B X Unknown

Sample Disposal:
__Return to Client X Disposal by Lab __Archive __(# of months)

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Paul Lunbeck	2.23.05 1410	Cooler	Cooler	2/24/05 8:30AM	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)